

Date: Wednesday, 11/21/2007 2:41:46 PM  
User: Kim Johnston

# Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : ARMOR SHIELD
Job Number : 35954	
Estimate Number : 12379	
P.O. Number : <i>N/A</i>	Part Number : D407667105A
This Issue : 11/21/2007 S.O. No. : <i>NA</i>	Drawing Number : DSI9326
Prsht Rev. : NC	Project Number : N/A
First Issue : <i>N/A</i> Type : LANDING GEAR	Drawing Revision : A
Previous Run : 34328	Material : <i>N/A</i>
Written By : <i>[Signature]</i>	Due Date : 11/28/2007 Qty: 1 Um: Each
Checked & Approved By : <i>[Signature]</i> 07.11.21	
Comment : Est Rev: A New Issue 06-04-19 JLM	

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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Comment: Photocopy bluefile & type labels per PPPD407-667-105A CHG001  
Add DSI 9326 to existing paper work.

2.0	D407667105	FWD Crosstube
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
Fwd Crosstube  
Batch: *31549*

3.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
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Comment: HAND FINISHING RESOURCE #1  
1-Remove tube from packaging

2-Apply Armor sheild as per DSI 9326  
A/R Armor Sheild Batch: *106053*

4.0	QC14	INSPECT SPRAY PAINT
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Comment: Inspect Spray Paint

5.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1  
Identify and pack for shipping as per PPP D407-667-105A  
Location: \_\_\_\_\_  
PPP Rev: *B*

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D107-667-105A PAR #: N/A Fault Category: Prod / Finishing NCR: (Yes) No DQA: ( ) Date: 07/11/26  
 QA: N/C Closed: (X) Date: 07.12.03

NCR: <u>35954</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07/11/26	3.0	Derriving inspection foreign objects (Dirt/Dust/Markings) were found under the Armour shield.	<u>(Signature)</u>	<del>Strip and Remove</del>	<u>BT</u> 07/11/27	<u>BT</u> 07/11/28	<u>(Signature)</u>	<u>(Signature)</u>
				Remove <del>all</del> supports and clamps				
		R.C. Humman error/take was not cleaned before applying	<u>(Signature)</u>	Strip entire tube of paint and Armour shield with	<u>BT</u> 07/11/27	<u>BT</u> 07/11/28	<u>(Signature)</u>	<u>(Signature)</u>
				Re prime and paint with Immom. as per QST 005	<u>BT</u> 07/11/27	<u>BT</u> 07/11/28		
				Inspect QCL#14.	<u>11/2</u>	<u>BT</u> 07/11/28		
				Reinstall Abrasion strips B# 34642 and supports B# and clamps B# <u>NA</u>	<u>BT</u> 07/11/28	<u>BT</u> 07/11/29	<u>(Signature)</u>	<u>(Signature)</u>
				Clean and Re Apply Armour shield B# 106 053 as per QST 005	<u>BT</u> 07/11/29	<u>BT</u> 07/11/29	<u>(Signature)</u>	<u>(Signature)</u>

NOTE: Date & initial all entries

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Drawing Name: ARMOR SHIELD

Job Number: 35954

Part Number: D407667105A

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC21

FINAL INSPECTION/W/O RELEASE



①

Comment: FINAL INSPECTION/W/O RELEASE

12/01/11/30

Job Completion



UAF-11-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# DART SERVICE INSTRUCTION

To further protect Dart crosstubes from mechanical damage in service, they may be treated with "Armor Shield" surface treatment. To designate crosstubes with 'Armor Shield' add 'A' to the Part Number. For example, D206-667-101A is a D206-667-101 crosstube coated with Armor Shield. The Change Number of Dart crosstubes with "Armor Shield" is affected as per above table. It is acceptable to apply the Armor Shield in regions shown in Figure 1 or Figure 2 only. It is **NOT** acceptable to apply Armor Shield in the cuff and support/clamp regions.

INSTALLATION	STC		CHANGE NUMBER	
	CANADIAN	FAA	DSI 9326 REV. A (Proform PF746/746-1 Treatment)	DSI 9326 REV. B (BCG4 Treatment)
D205-596-101A/-103A/-105/-107A	SH03-6 ISSUE 3	SR01742NY	CHG 001	CHG 002 (or later)
D212-664-101A/-201A D412-664-203A D412-664-105A/-205A	SH01-9 ISSUE 3	SR01298NY	CHG 002 (or earlier) CHG 004 (or earlier) N/A	CHG 003 (or later) CHG 005 (or later) CHG 001 (or later)
D206-667-101A/-103A/-201A/-203A D407-667-105A/-205A	SH01-5 ISSUE 3	SR01304NY	CHG 001 CHG 002 (or earlier)	CHG 002 (or later) CHG 003 (or later)
D058-676-101A/-201A	N/A	SR01018SE	CHG 001	CHG 002 (or later)
D350-748-101A/-201A	SH06-27 ISSUE 1	SR02359NY	N/A	CHG 001 (or later)

## 1.0 TO APPLY ARMOR SHIELD

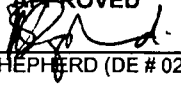
- 1.1 Ensure the crosstube is appropriately finished in accordance with the relevant manufacturing drawing or Instruction for Continued Airworthiness (ICA).
- 1.2 Clean/degrease surface of crosstube using Methyl Ethyl Ketone (MEK), 4105S Wash'n'Wipe Degreaser, or equivalent and wipe the surface to clean the entire area
- 1.3 Mask areas around supports and cuffs per Figure 1 or Figure 2 (D350-748-101/-201 only). Abrade paint finish in areas requiring protection using 800 grit sandpaper. Ensure the surface is de-glossed.
- 1.4 Re-clean the surface per Step 1.2.
- 1.5 Mix BCG4 Component A and BCG4 Component B in accordance with manufacturer's instructions.
- 1.6 Apply 5 wet coats in accordance with manufacturer's instructions.
- 1.7 To avoid hard tape line, unmask immediately after application of last coat.
- 1.8 Allow BCG4 to dry in accordance with manufacturer's instructions.







## 2.0 ARMOR SHIELD REMOVAL / RE-APPLICATION

To remove the Armor Shield coating or if damage to the coating and/or crosstube is observed during inspection.

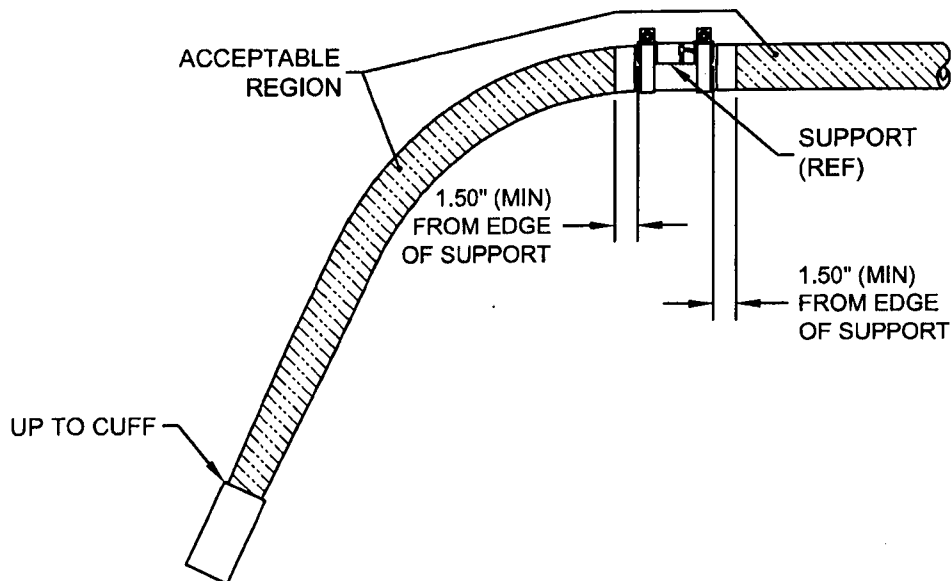
- 2.1 Remove Armor Shield from the affected area using 80 grit sandpaper. To remove Armor Shield from larger areas, bead blasting has been determined to be the most effective technique.
- 2.2 Repair mechanical damage (within limits) to the crosstube and touch up finish in accordance with the relevant ICA.
- 2.3 Apply Armor Shield in accordance with Section 1.0 of these instructions.

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WITHOUT NOTICE  
WORK ORDER  
NO. \_\_\_\_\_

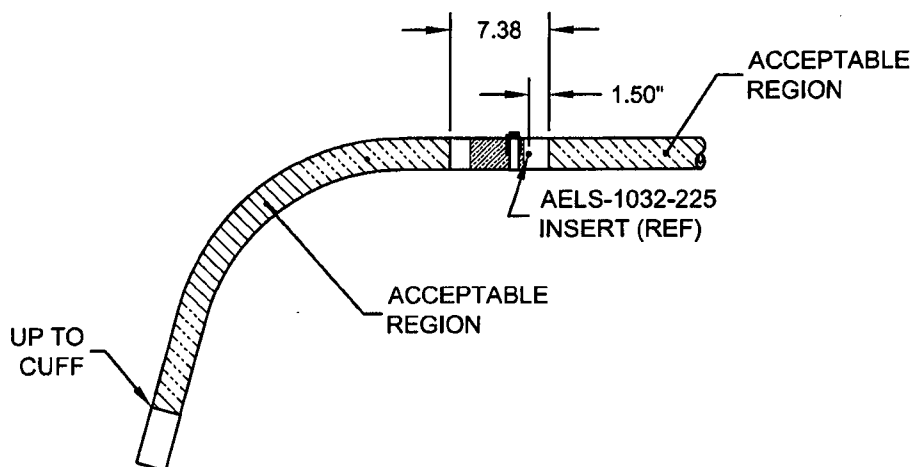
CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01	
APPROVED	
BY: 	
D. SHEPHERD (DE # 02)	
DATE:	07.10.17
CERT. NO.:	SEE TABLE
ISSUE NO.:	SEE TABLE

B	BCG4 REPLACES DISCONTINUED PROFORM PF 746 OR PF 746-1; ADD D350-748-101/-201	MB	07.10.17
A	NEW ISSUE	PH	06.02.14
REV.	DESCRIPTION	BY	DATE
DESIGN		<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA  DRAWING NO. REV. B DSI 9326 SHEET 1 OF 2  TITLE SCALE ARMOR SHIELD NTS	
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	07.10.17		

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**FIGURE 1 - ACCEPTABLE REGIONS TO BE COATED WITH ARMOR SHIELD**  
(SEE FIGURE 2 FOR D350-748-101/-201 CROSSTUBES)



**FIGURE 2 - ACCEPTABLE REGIONS TO BE COATED WITH ARMOR SHIELD**  
(D350-748-101/-201 ONLY)

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WORK ORDER  
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CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED  
BY: [Signature]  
D. SHEPHERD (DE # 02)

DATE: 07.10.17  
CERT. NO.: SEE TABLE  
ISSUE NO.: SEE TABLE

DESIGN	<u>PH</u>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	<u>[Signature]</u>		
CHECKED	<u>PH</u>	DRAWING NO.	REV. B
MFG. APPR.	<u>[Signature]</u>	DSI 9326	SHEET 2 OF 2
APPROVED	<u>[Signature]</u>	TITLE	SCALE
DE APPR.	<u>[Signature]</u>	ARMOR SHIELD	NTS
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